Department of Primary Industries

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18 May 2012

Dr Colin Grant
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Ref: IM/01/0107

Dear Dr Grant

DPI RESPONSE TO THE DRAFT IMPORT RISK ANALYSIS FOR FRESH GINGER FROM FIJI

Thank you for the information of 11 April 2012, notifying the Department of Primary Industries (DPI) of the opportunity to comment on the draft Import Risk Analysis report for fresh ginger from Fiji by 5 June 2012.

Specialists within DPI have previously examined the draft pest categorisation table and made the following comments in a reply to your group on 23 August 2011:

1. Although ginger is not grown as a commercial crop in Victoria, import of fresh ginger provides a potential pathway for pests and pathogens which may cause significant damage to other crops or to the natural environment.
2. The Ralstonia solanacearum species complex is a serious cause of disease which can infect hundreds of plant species, including potato, tomato, banana and ginger. The introduction of additional strains of this pathogen to Australia could have significant consequences. Although Table 2 indicates that R. solanacearum it is not present in Fiji, Jeong et al 2007 indicates that Fiji do have a potato race. A full risk analysis of this pathogen complex is recommended.
3. Armillaria mellea, or whatever species of Armillaria are present in Fiji, should be reconsidered as a quarantine pest. A. mellea may not even occur in Australia (Grgurinovic (1997), APPD (2011)).
4. Rose beetle (Adoretus versutus) would appear to be a potential quarantine pest for Australia which could be on the pathway. It is widespread in Fiji where it is a serious pest of a wide range of host plants including vegetables, ornamentals and coffee (Watt 1983). Watt considered it a serious quarantine risk to islands where it does not already occur. Further consideration should be given to categorising this as a quarantine pest requiring pest risk assessment.

5. Piletocera xenthosoma is a regulated pest in NZ (see link below) and larvae have been intercepted on ginger exports to USA and Canada. Further consideration should be given to categorising this as a quarantine pest requiring pest risk assessment.
6. http://ashraf75.powweb.com/database/invasive-species/species-Piletocera-xanthosoma.php
7. Additional comments made by specialists in DPI, which are relevant to the draft IRA, include the following:

    - A product such as fresh ginger rhizomes provides an ideal pathway to introduce pest and pathogens because rhizomes can be diverted from their intended use and be planted and grown. This provides any accompanying pests or pathogens the opportunity to establish on ginger in Australia, from where it can then move to other hosts.

    - The comment p16 that planting material is usually sourced on-farm from the previous crop indicates that the quality of planting material is not high, as continued vegetative propagation of such a crop leads to the ready accumulation of pests and diseases (including nematodes and viruses) in the planting material.

    - Armillaria mellea is known to be a pathogen of ginger (Guyana Technical Bulletin 23, 2004; NZ Import Health Standard ginger from Vanuatu, 1998) and should be included in the risk analysis (p66 draft IRA report: Fresh ginger from Fiji). Armillaria spp are often found in native forests and when these areas are cleared and planted, the pathogen often infects the new host, becoming an often intractable problem to the grower. Infection of ginger rhizomes has been reported, as well as infection of a range of other non-woody hosts including strawberry, potato and carrot (Fox 2000, Washington 2010).

    - Fiji ginger weevil (Elytroteinus subtruncatus) has a relatively wide host range including ginger, kava, lemons, Begonia and other hosts. Assessment of probability of establishment and the consequences seem to be underestimated. The establishment of this pest has apparently occurred in Hawaii, but the draft IRA bases its estimate of low on this statement on page 24 of the draft report "It is not known if this behaviour also occurs on ginger rhizomes (laying of a single egg per fruit in lemons), but it is considered likely." The estimate of consequences at very low also seems an underestimate, as USA considers it to be a high-risk pest (page 22 of the draft report).

Thank you for the opportunity to provide comments on the draft Import Risk Analysis report and I look forward to being notified of the progress of this IRA.

Yours sincerely

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Attachment:

References:

Adoretus versutus link retrieved 9/8/2011
http://www.cabi.org/cpc/default.aspx?site=161&page=874&profile=21&query=adoretus&forcereload=true

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http://ashraf75.powweb.com/database/inivasive-species/species-Piletocera-xanthosoma.php

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Watt JC (1986) Pacific scarabaeidae and elateridae (coleopteran) of agricultural significance. Agriculture, Ecosystems and Environment 15 (2-3) 175-187.

Fox RTV (2000) Armillaria Root Rot: Biology and Control of Honey Fungus.